Abbreviations/Acronyms

3G	third generation	D	
3GPP	3rd Generation Partnership Project	DAT	digital audio tape
4G	fourth generation	dB	decibel
	-	DFS	Dynamic Frequency Selection
A		DHS	Department of Homeland Security
ACR	Absolute Category Rating	DIETS	Department of Commerce ISSI
AGILE	Advanced Generation of		Emulation and Test System
	Interoperability for Law Enforcement	DLL	Dynamic Link Library
ANSI	American National Standards Institute	DNR	Draft New Recommendation
ANTD	Advanced Networking Technologies	DOC	Department of Commerce
	Division (of NIST)	DOD	Department of Defense
APCO	Association of Public-Safety	DSCP	Digital Sampling Channel Probe
	Communications Officials	DSES	Deep Space Exploration Society
APD	Amplitude Probability Distribution	DS-UWB	Direct-Sequence Ultrawideband
APIC	APCO Project 25 Interface Committee	DTV	digital television
ASR	airport surveillance radar		
ATB	antenna testbed	\mathbf{E}	
ATIS	Alliance for Telecommunications	EBU	European Broadcasting Union
	Industry Solutions	EIA	Electronic Industries Alliance
D		EMC	electromagnetic compatibility
В	D 1D 1T 1 C	EMS	Emergency Medical Services
BBTG	BroadBand Task Group	ETS	Emergency Telecommunications
BIM	Base Interface Module		Service
BVQM	Batch VQM	ETSI	European Telecommunications Standards Institute
C		EVA	Evaluation License Agreement
CAI	Common Air Interface		
CASM	Communication Assets Survey and	\mathbf{F}	
	Mapping	FAA	Federal Aviation Administration
CD	compact disk	FCC	Federal Communications Commission
CDA	Code Domain Analyzer	FFT	fast Fourier transform
CDMA	Code Division Multiple Access	FG	Focus Group
CEA	Consumer Electronics Association	FHWA	Federal Highway Administration
CI	Console Interface	FLC	Federal Laboratory Consortium for
CIP	Critical Infrastructure Protection		Technology Transfer
CMRS	Commercial Mobile Radio Services	FPGA	Field Programmable Gate Array
CONUS	Continental U.S.	FPIC	Federal Partnership for Interoperability
COPS	Office of Community Oriented		Communications
CD + D +	Policing Service	FS	Fixed Services
CRADA	Cooperative Research and	FSI	Fixed/Base Station Interface
CDDI	Development Agreement	FTP	File Transfer Protocol
CRPL	Central Radio Propagation Laboratory Communication System Performance	FTTA	Federal Technology Transfer Act 1986
CSPM	Model	FY	Fiscal Year
CSPT	Communication System Planning Tool		
CVQM	Command Line VQM		
CVQIVI	Command Line v Qivi		

G		ITU-R	ITU — Radiocommunication Sector
GETS	Government Emergency	ITU-T	ITU — Telecommunication
CH	Telecommunications Service	IVOM	Standardization Sector
GHz GIF	gigahertz	IVQM IWCE	In-Service VQM International Wireless Communications
GIS	Graphics Interchange Format Geographic Information System	IWCE	Expo
GLOBE	Global Land One-km Base Elevation		Ехро
GEODE	Global Positioning System	J	
GSM	Global System for Mobile	JRG	Joint Rapporteur(s) Group
GUI	Graphical User Interface	0110	tom rupportuni(s) eroup
GUI	Grapmear Oser Interface	K	
Н		kHz	kilohertz
	High Accuracy NDGPS	KMF	Key Management Facility
HATS	head and torso simulator	KMM	Key Management Message
HD	high definition		, .
HDTV	High Definition Television	${f L}$	
HF	high frequency	LAN	Local Area Network
HTML	Hypertext Markup Language	LFMF	low frequency/medium frequency
		LMDS	Local Multipoint Distribution Service
I		LMR	Land Mobile Radio
IACP	International Association of Chiefs of	LNA	low noise amplifier
	Police	LOS	line of sight
IAFC	International Association of Fire Chiefs		
ICEPAC	Ionospheric Communications	\mathbf{M}	
	Enhanced Profile Analysis and Circuit	MAC	media access control (layer)
ICTAR	Prediction Program	MB-OFDM	Multi-Band Orthogonal Frequency-
ICTAP	Interoperability Communications		Division Multiplexing
IEEE	Technical Assistance Program Institute of Electrical and Electronics		megabits per second
IEEE	Engineers	MD	Multimedia Definition
IETF	Internet Engineering Task Force	MHz	megahertz
IF	intermediate frequency	MIMO	Multiple Input Multiple Output
IMS	IP Multimedia Subsystem	MMQA	Multimedia Quality Assessment
IP	Internet Protocol	MOU	Memorandum of Understanding
IP-AVQ	Internet Protocol Audio Video Quality	MPLS	Multiprotocol Label Switching
IPTV	Internet Protocol Television	MSC	message sequence chart
IRAC	Interdepartment Radio Advisory	MSTV	Association for Maximum Service Television
	Committee	MTOM	mobile-to-mobile
ISART	International Symposium on Advanced	WITOWI	moone-to-moone
	Radio Technologies	N	
ISM	Industrial, Scientific, and Medical	NCS	National Communications System
ISO/IEC	International Organization for	NDGPS	Nationwide Differential Global
	Standardization/International	112015	Positioning System
ICCI	Electrotechnical Commission	NE	Network Equipment
ISSI	Inter-rf Subsystem Interface	NGN	Next Generation Network
ITM	Irregular Terrain Model	NIC	network interface card
ITS	Institute for Telecommunication Sciences	NIST	National Institute of Standards and Technology
ITSA	Institute for Telecommunication Sciences and Aeronomy	NOAA	National Oceanic and Atmospheric
ITU	International Telecommunication Union	NPSTC	Administration National Public Safety
			Telecommunications Council

NS/EP	National Security and Emergency	R	
NTIA	Preparedness National Telecommunications and	RACF	Resource and Admission Control Function
11111	Information Administration	RAID	redundant array of independent disks
NWS	National Weather Service	RBS	Radio Base Station
		RCG	Radar Correspondence Group
O		RF	radio frequency
OAM	Operation, Administration and	RFSS	Radio Frequency Subsystem
	Maintenance	RLAN	Radio Local Area Network
Ofcom	Office of Communications	RPM	Radio Performance Measurements
OIC	Office of Interoperability and	RR	Reduced Reference
	Compatibility (of DHS)	RRC	Regional Radio Conference
OLES	Office of Law Enforcement Standards	RR-NR	Reduced Reference – No Reference
OMB	Office of Management and Budget	RSMS	Radio Spectrum Measurement Science
OPAD	Office of Policy Analysis and	RSMS-4	4th Generation RSMS
	Development	RTP	Real-time Transport Protocol
OQPSK	Offset Quadrature Phase-Shift Keying		
OSM	Office of Spectrum Management	S	
OT	Office of Telecommunications		Public Safety Wireless
OTAR	Over the Air Rekeying		Communications
OTP	Office of Telecommunications Policy	SD	Standard Definition
OV	operational view	SDMA	Space Division Multiple Access
_		SDO	Standards Development Organization
P		SDoC	Supplier's Declaration of Compliance
P25	Project 25	SDTS	Spatial Data Transfer Standard
P/A	peak-to-average ratio	SE	spectrum efficiency
PAR	precision approach radar	SG	Study Group
PBS	Public Broadcasting System	SIP	Session Initiation Protocol
PC	personal computer	SIPRNET	Secret Internet Protocol Routable
PCAP	packet capture		Network
PCS	Personal Communications Services	SMP	simple mapping project
PDA	personal digital assistant	SMPTE	Society of Motion Picture and
PESQ	Perceptual Evaluation of Speech		Television Engineers
DDOC	Quality	SOR	Statement of Requirements
PRQC	Network Performance, Reliability and Quality of Service Committee	SPAWAR	Space and Naval Warfare Systems Command
PS	public safety	SSMD	Site Specific Model
PSAF	Public Safety Architecture Framework	SU	Subscriber Unit
PSAL	Public Safety Audio Laboratory	SV	Systems View
PSAP	Public Safety Answering Point		•
PSAWG	P25 Systems Architecture Working Group	T	
PSD	power spectral density		Telecommunications Analysis Services
PSTN	Public Switched Telephone Network	TASO	Television Allocations Study
PSVQ	Public Safety Video Quality	TDIM	Organization
PTT	Push-to-Talk	TBIM	Trunking Base Interface Module
		TG TIA	Task Group Telecommunications Industry
Q			Association
QoS	Quality of Service	TMOC	Telecom Management and Operations
QPSK	Quadrature Phase-Shift Keying	TD	Committee
		TR	Technical Report
		TSB	Telecommunications Systems Bulletin

TV	television	W	
TVA	Threat Vulnerability Analysis	WAS	Wireless Access System
		W-CDMA	Wideband CDMA
U		WCTF	Wireless Communications Task Force
UAV	unmanned aerial vehicle	Wi-Fi	Wireless Fidelity
UHF	ultra high frequency	WLAN	Wireless LAN
URSI	International Union of Radio Science	WMO	Wireless Management Office
U.S.	United States	WNRC	Wireless Networks Research Center
USGS	U.S. Geological Survey	WP	Working Party
USTTI	U.S. Telecommunications Training	WPAN	Wireless Personal Area Network
	Institute	WRC	World Radiocommunication
UWB	ultrawideband		Conference
		WTSC	Wireless Technologies and Systems
\mathbf{V}			Committee
VHF	very high frequency		
VLF	very low frequency	X	
VoIP	Voice over Internet Protocol	XML	Extensible Markup Language
VPN	Virtual Private Network		
VQEG	Video Quality Experts Group	Y	
VQM	Video Quality Metric	YIG	yttrium-iron-garnet
VSA	vector signal analyzer		
VSG	vector signal generator		
VTG	Vocoder Task Group		
v 1 O	vocoder rask Group		



An ITS engineer at work (photograph by F.H. Sanders).